San Joaquin Valley Water Reliability Act

Historical Background

Since the construction of the federal Central Valley Project, California's water needs have grown dramatically while supplies have stayed virtually steady. In the past few years, we saw massive economic damage inflicted by the capricious curtailment of water deliveries to San Joaquin Valley communities.

Such curtailments cost thousands of farm workers their jobs, inflicted up to 40 percent unemployment in some towns, and fallowed hundreds of thousands of acres of fertile farmland. Even now, when California has experienced near record precipitation and reservoirs are in flood operation, some farmers are only receiving 80% of their contracted water supplies. This year, Mother Nature has helped mitigate the current circumstance. But a far worse man-made drought, similar to 2009 where water allocations barely reached 10%, could return because draconian regulations are in place to once again divert water from farms to three inch fish – the Delta smelt.

The San Joaquin Valley Water Reliability Act promotes water policies that facilitate the delivery of the California's abundant supply of water, as well as support the implementation of an economically feasible and environmentally sustainable river restoration on the San Joaquin River. This document provides historical background on the issues that are addressed in the San Joaquin Valley Water Reliability Act.

California Water History

California has experienced drought twelve times since 1850, according to hydrologic records. These drought periods and the need to provide water to a rapidly growing population and farms led to an innovative and complex water storage and delivery system. The system is a combination of two projects called the Central Valley Project (CVP), first authorized by the federal government in 1935 and the State Water Project (SWP), authorized by the State of California in 1960. Since 1986, as a result of Public Law 99-546, both projects have conducted coordinated operations (see maps).

The CVP is a federal multi-purpose system of reservoirs and canals that collects and delivers waters from northern California and the Sierra Nevada mountains. It consists of twenty dams and reservoirs, eleven hydropower plants and approximately 500 miles of canals and other distribution systems. In normal water years, the CVP can deliver a total of seven million acre feet (an acre foot is about 326,000 gallons) of water. The CVP can annually generate five billion kilowatt hours of electricity under normal water conditions. Most water is used to irrigate over three million acres of farmland, producing crops with a farmgate value of more than $3.5 billion annually. That value multiples several times in the local and regional economies. However, about 15% of the water is used to serve over two million urban and industrial customers.

The SWP serves similar purposes and includes thirty four water storage facilities, twenty pumping stations, five hydroelectric power plants, and about 700 miles of canals and pipelines. It provides supplemental water to approximately 25 million Californians and about 750,000 acres of irrigated farmland.

Water from both the CVP and SWP delivered to southern portions of the State is conveyed through the Sacramento-San Joaquin Delta (Delta) through two massive pump systems near Tracy, California. Since northern California contains over two-thirds of the water resources and southern California has two-thirds of the human population and needs irrigation water, these two projects deliver water to over 27 million humans south of the Delta pumps and around the San Francisco Bay area.

These projects have not only helped Californians get through periods of extended drought, but have helped create a massive agricultural economy that supplies the nation with more than half of the country's vegetables and a vast majority of fruits and nuts.

The current California water storage and delivery system was designed to serve 22 million people. Currently, the State has 37 million residents and the population is expected to nearly double by 2050. In addition, there are multiple, competing demands for water. With a few local exceptions, a new major reservoir has not been built in three decades. In fact, the last federal storage project built was the New Melones Dam in 1978. While urban and rural communities have pursued efficiency improvements, such as drip-irrigation, the planting of higher value permanent crops and water re-use, most analysts believe that conservation will not come close to resolving water supply issues nor will it address environmental needs.

Environmental Mandates and Litigation

Environmental statutes and related litigation supposedly aimed at protecting species and Delta water quality have led to serious water conflicts in California. The federal Endangered Species Act (ESA), in particular, has been the major environmental driver in water supply conflicts. Specifically, the federal court system has been the environmental community's primary means to curtail historic water operations over the last decade. Many of these lawsuits and resulting decisions have been over the interpretation of the Endangered Species Act (ESA) as it relates to salmon, Delta smelt, sucker fish or other species.

The most vocal and recent controversy has involved litigation and federal plans on protecting Delta smelt, a three-inch fish. Environmental organizations have consistently blamed the Delta pumps as the main cause for smelt decline. Scientists and water users south of the Delta, on the other hand, pin the blame on numerous factors, including predation by non-native fish, invasive species, in-delta diversions, the discharge of toxic chemicals as well as the pumps. To date, hundreds of millions of taxpayer and ratepayer dollars have been spent to investigate the specific causes of smelt declines and to protect the species from the operation of the pumps. In addition, over one million acre feet of water – enough to irrigate 300,000 acres or a land area roughly half the size of Rhode Island -- annually has been dedicated to protecting this and other species. However, there is no consensus on what is causing the continual decline.

Environmental organizations blaming the pumps as the main cause of Delta smelt declines successfully used the federal court system to achieve many of their objectives. In May 2007, Federal District Court Judge Oliver Wanger ruled in *Natural Resources Defense Council vs. Kempthorne* that the Interior Department's Biological Opinion on Delta smelt was "arbitrary, capricious and contrary to law." This eventually led to a revised Biological Opinion that is the main source of controversy today. Under the current Biological Opinion, increased amounts of water are re-allocated towards Delta smelt during the time farm communities in the west-side of the San Joaquin Valley need it most. A Biological Opinion on salmon and orcas has led to additional water restrictions. There is disagreement about the causes of the salmon fisheries declines in California rivers, but a 2010 report by the National Marine Fisheries Service determined that poor ocean conditions were by far the most important factor causing this decline.

The results of the water restrictions have been devastating. In 2010, over one million acre feet of water were lost due to the smelt and salmon biological opinions. Although jobs estimates differ, thousands of jobs were lost and hundreds of thousands of acres of arable land were fallowed in 2010. The City of Mendota experienced an unemployment rate of 40% and in resulting food lines, imported Chinese-produced food was distributed to those unemployed as a result of what was termed a "man-made drought."

Even though California has recently experienced substantial precipitation and snowpack is 165% of normal, some irrigation districts south of the Delta are now slated to receive only 80% of their water allocation. The Bureau of Reclamation (Reclamation), the federal agency operating the CVP, maintains that this allocation would be normal for this type of above average water year, but farmers that receive the water counter that in a year like this, their allocation should be at 90%, at a minimum. The farmers' assertion is correct in light of recent history. In 2006, a water year that was much like the current water year, the farmers received a 65% allocation in February, but by April they were at 85% and in May went to a 100% allocation. In 2005, a year that was actually drier than the current water year, these farmers received an initial allocation of 65% in February and ultimately went up to an 85% allocation. There is only one difference between now and then: in 2005 and 2006 the operations of the CVP were not constrained by Biological Opinions issued in December 2008 and May 2009 by the U.S. Fish and Wildlife Service (smelt) and the National Marine Fisheries Service (salmon), respectively.

In late 2010, the United States District Court for the Eastern District of California held that the revised biological opinions are unlawful and illogical and the National Academy of Sciences has said those opinions are not supported by science. At this time, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service are developing a combined biological opinion on the Delta smelt and salmon.

The Central Valley Project Improvement Act of 1992

Water curtailments are not a recent problem. In fact, since 1992, when the Central Valley Project Improvement Act[1] (CVPIA) was enacted and the first Delta endangered species was listed, farmers on the west-side of the San Joaquin Valley have experienced more restrictions placed on CVP operations. Indeed, prior to 1992, these farmers could expect to receive 100% of their contract supplies, year-in and year-out, except in years of extremely dry hydrologic conditions. But since 1992, more than 1.2 million-acre feet of water have been reallocated on an annual basis from irrigation to fish and wildlife uses. As a result, in an average water year, these farmers can expect to receive only a 40–45% allocation under current regulations and biological opinions.

The CVPIA was enacted while California was experiencing the effects of a long-term drought. As a result, many of the provisions in the Act were aimed at conserving water, increasing the use of water transfers, and providing additional water for fish and wildlife purposes. Environmental organizations, some recreationalists, and some urban water users viewed the changes as environmentally sound while many farmers, project irrigators, and other water users viewed many of the CVPIA provisions as unduly restrictive, punitive, and costly.

[1] In 1992, Congress passed the Central Valley Project Improvement Act (CVPIA). The provision was part of an omnibus legislative package, signed into law by President George H.W. Bush and shepherded through the Congress by Rep. George Miller (D-CA) and former Sen. Bill Bradley (D-NJ), with a controversial goal to refocus the purpose and management of the CVP towards environmental mitigation. Specifically, the legislation amended the authorized purposes of the CVP to include the protection, restoration, and mitigation of fish and wildlife. Water supply for this new authorized purpose was given equal priority to agriculture and other original uses. Other major and controversial provisions include contracting reform, revised water pricing, water entitlement for fish and wildlife, and establishment of a water and power user-financed restoration fund.

One of the most controversial aspects of the CVPIA was the dedication of 800,000 acre-feet/year[2] of CVP water for fish and wildlife purposes. This provision reallocated water that had been delivered to farmers and cities. This reallocation has led some to ask whether the fish and wildlife flows have had meaningful impact and whether the accounting of the flows has been properly documented. In addition, others point out that the reallocation has created water-use uncertainty.

The CVPIA also authorized the CVP Restoration Fund to help pay for the vast majority of the actions taken to implement this law. Over $784 million in water and power ratepayer revenues have been collected for this purpose since 1992. Many water and power customers have cited a lack of transparency over funding expenditures.

The Bay-Delta Accords of 1994

The term "California water wars" originated from conflict over CVP and SWP resources during the six year drought between 1987 and 1992. During that time, the implementation of the Clean Water Act (CWA) by the Environmental Protection Agency (EPA) generated controversy between the State of California, the federal government, environmentalists, and users of the state and federal water systems. After years of conflict between state and federal regulators and lawsuits by environmentalists on the implantation of water quality standards, the State of California brought all "warring" parties to the negotiating table to try and find a solution which would benefit all users – environmentalists, agriculture, and urban.

At the table was California Governor Pete Wilson, Interior Secretary Bruce Babbitt, Commerce Secretary Ron Brown, EPA Director Carol Browner, various local water agencies, and key environmental interest groups. The result was the 1994 "Principles for Agreement on Bay-Delta Standards between the State of California and the Federal Government" – better known as the Bay-Delta Accord. This landmark agreement, universally praised, was intended to begin the process of improving water quality in the Delta and increasing water reliability for users.

According to the Congressional Research Service the Accord included the following elements: provisions to regulate springtime flow and export limits to benefit fish species; operational flexibility to comply with provisions of the ESA that address water supply and species monitoring issues among others; and measures to improve environmental conditions in the Bay-Delta Estuary.

The Accord also spawned a process which became known as CALFED. The initial authorization of federal funding for the CALFED Program came in 1996 with the enactment of Public Law 104-208. The goal was to improve water quality standards, coordinate federal and state project operations, and develop a joint federal-state process for long-term solutions to environmental, water supply, and water quality problems in the Bay-Delta. The CALFED Program was substantially retooled and reauthorized in 2004.

The general consensus is the CALFED process, not the Bay-Delta Accord, was a failure. According to the Little Hoover Commission, "CALFED is costly, underperforming, unfocused and unaccountable." While support for CALFED has evaporated, the ideals vested in the Bay-Delta Accord remain alive and many want to renew the commitments made in 1994.

[2]This 800,000 acre-feet of water is commonly known as "b2 water" in reference to CVIPA Section 3406(b)(2).

The San Joaquin River Restoration

For decades, controversy has surrounded construction of the Friant Dam which was built in the 1940s on the Upper San Joaquin River forming Millerton Lake. Friant Dam diverts San Joaquin River flows to provide much of the water for the Friant Division of the CVP. The Friant Division provides irrigation and municipal water to farms and communities along the southern San Joaquin Valley's east side. Nearly one million acres have been irrigated with Friant water and several cities and towns receive all or a major part of their water supply from the Friant Dam and related structures. As a result of t water diversion at the Dam, the 153-mile stretch of the San Joaquin River below Fraint Dam to the confluence of the Merced River was virtually dry. The federal Bureau of Reclamation signed 40-year water delivery contracts, which determine the allocation and price of Friant water, with water users in 1955.

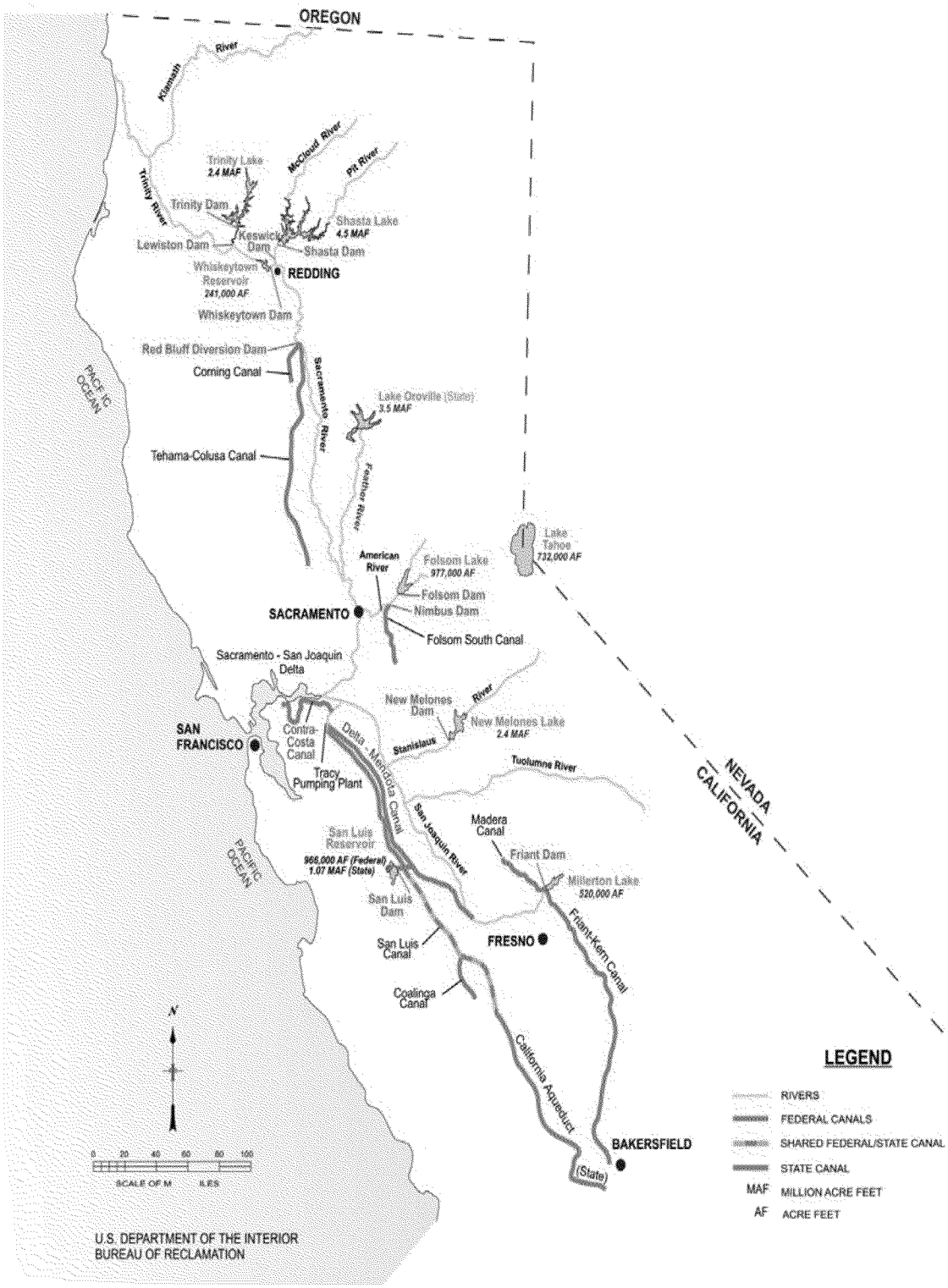
In 1987, the Friant water users started to negotiate the renewal of the water contracts with Reclamation. On December 20, 1988, the Natural Resources Defense Council (NRDC) and a coalition of conservation and fishing groups filed *Natural Resources Defense Council, et al. vs. Kirk Rodgers, et al.* to challenge the contract renewals. Subsequent amendments to the lawsuit alleged that Reclamation violated California Fish and Game Code Section 5937, the National Environmental Protection Act (NEPA), and the Endangered Species Act (ESA). Section 5937 requires dam owners to "allow sufficient water to pass over, around or through the dam, to keep in good condition any fish that may be planted or exist below the dam." On May 31, 1995, federal Judge Lawrence K. Karlton, a Carter Administration appointee who decreed the Pledge of Allegiance to be unconstitutional, ruled that Reclamation did not violate NEPA but was in technical violation of the required impact studies on listed species under the ESA. The Ninth Circuit Court of Appeals affirmed much of Karlton's opinion, but sent the Section 5937 challenge back to Karlton for further consideration.

After the Supreme Court declined to hear the NEPA and ESA portions of the case in 1999, Friant water users went to the NRDC in an attempt reach a settlement. The parties were unable to reach an agreement by the settlement deadline in April 2003. Without a settlement, NRDC and its legal allies filed a seventh Amended Complaint in August 2003, alleging violation of Section 5937 because salmon runs were not restored. The Complaint sought to force the release of water down the San Joaquin River channel from Friant Dam. In August 2004 and July 2005, Karlton ruled in NRDC's favor, finding that Reclamation was in violation of Section 5937. Karlton threatened to act as a "meat cleaver" to restore the River as a way of pushing the litigants to agree on restoration means and goals.

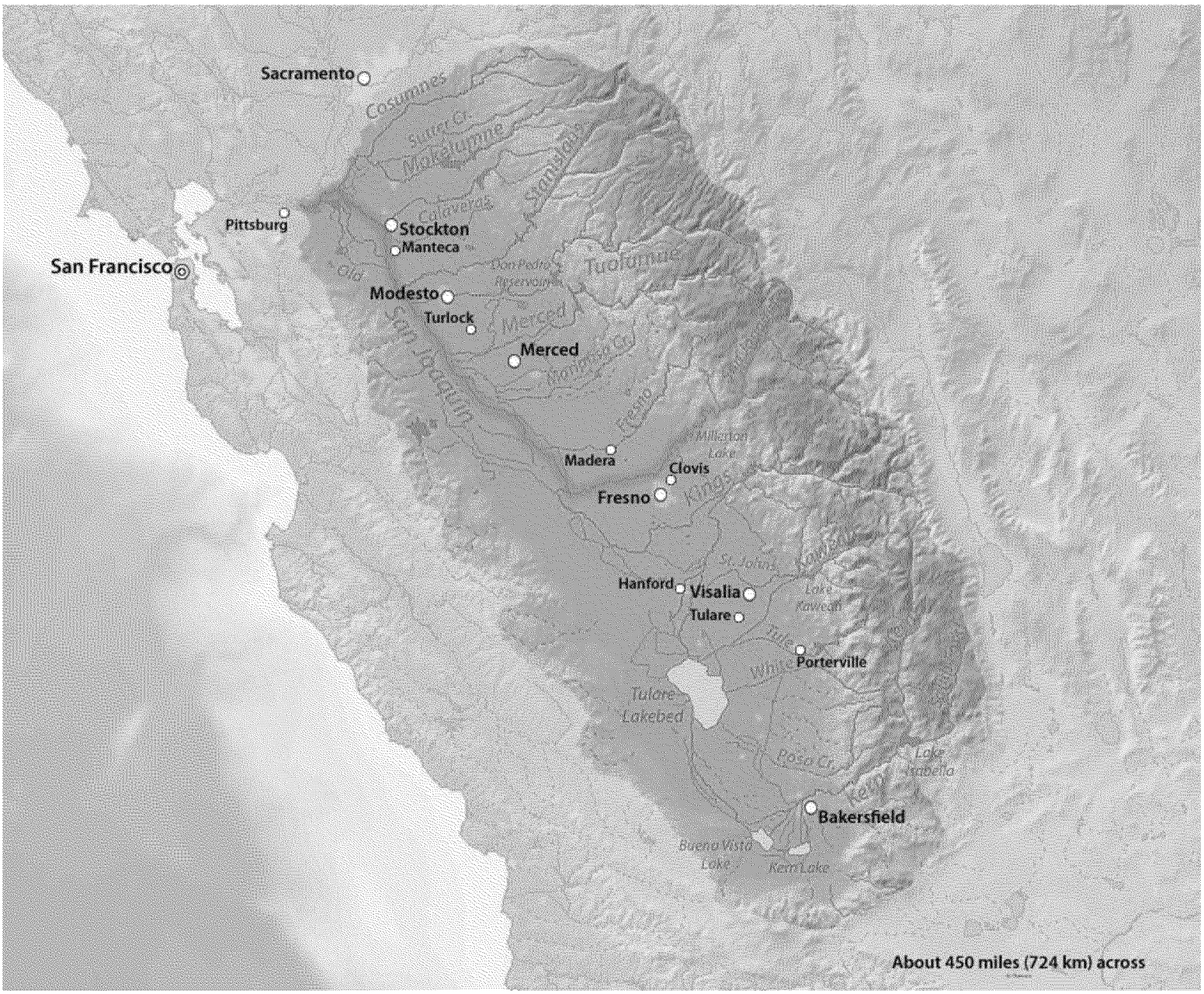
A new series of settlement negotiations began and all negotiating parties agreed on a final settlement on June 30, 2006. The settlement was then reviewed by some third party stakeholders and approved by the U.S. Justice Department. Karlton approved the settlement agreement on October 23, 2006. After three years of controversial disputes on the merits of the settlement, the Democrat Congress enacted Title X of P.L. 111-11, which codified the settlement agreement and directed the Bureau of Reclamation to carry out certain activities in the settlement: 1) restoring the dry part of the San Joaquin River through a series of interim and permanent flows that divert, on average, more than 200,000 acre feet per year from farms to fish; 2) re-introducing Chinook salmon into the River and; 3) mitigating water user impacts associated with river restoration and salmon re-introduction.

At time of enactment of Title X, the Congressional Budget Office estimated that the law and settlement agreement would increase net direct spending by $190 million over the 2009-2018 period and $200 million over the 2019-2040 period. In addition, implementation would increase discretionary spending by $271 million over the 2009-2018 period. In the current budgetary environment, many are asking if this is a reasonable use of taxpayer dollars.

California Federal and State Water Projects



Hydrological Map of the San Joaquin Valley



Hydrological Map of the Sacramento Valley